

1. A communication connection merge method performing merge process for consolidating a plurality of communication connection of a connection-oriented network at a node on the way of transfer route into a common communication connection, comprising:

a step of modifying collateral parameter of said existing communication connection which is judged to merge the new communication connection for enabling accommodation of the new communication connection in said existing communication connection; and

2. A communication connection merge method as set forth in claim 1, wherein said connection-oriented network is a multi-protocol label switching network, said communication connection is a label switched path and said node is a label switching router.

3. A communication connection merge method as set forth in claim 1, wherein said connection-oriented network is an asynchronous transfer mode network, said communication connection is a virtual

4. A communication connection merge method performing merge process for consolidating a plurality of communication connection of a connection-oriented network at a node on the way of transfer route into a common communication connection, comprising:

a step of modifying collateral parameter of said tunneling communication connection to merge the new communication connection for enabling accommodation of the new communication connection in said tunneling communication connection; and

5. A communication connection merge method as set forth in claim 4, wherein said tunneling communication connection recursively repeats merge upper level tunneling communication connection to lower

level tunneling communication connection for an arbitrary times
in a condition capable of branching at the terminal node.

6. A communication connection merge method as set forth in claim 4, wherein said connection-oriented network is a multi-protocol label switching network, said communication connection is a label switched path and said node is a label switching router.

7. A communication connection merge method as set forth in claim 4, wherein said connection-oriented network is an asynchronous transfer mode network, said communication connection is a virtual channel and said tunneling communication connection is a virtual path, and said node is an asynchronous transfer mode switch.

8. A communication connection merge method performing merge process for consolidating a plurality of communication connection of a connection-oriented network at a node on the way of transfer route into a common communication connection, comprising:

a step of newly setting a tunneling communication connection capable of accommodating collateral parameter of said existing communication connection and said new communication connection in a section where said existing communication connection and said new communication connection have a common transfer route upon merging new communication connection on setting for existing communication connection; and

a step of performing merge said existing communication connection

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means for modifying/collateral parameter of said existing communication connection which is judged to merge the new communication connection for enabling accommodation of the new communication connection in said existing communication connection; and

13. A node as set forth in claim 12, wherein said connection-oriented network is a multi-protocol label switching network, said communication connection is a label switched path and said node is a label switching router.

15. A node performing merge process for consolidating a plurality of communication connection of a connection-oriented network at a node on the way of transfer route into a common communication connection, comprising:

means for making judgment whether a tunneling communication connection is present in a section where said existing communication

means for modifying collateral parameter of said tunneling communication connection to merge the new communication connection for enabling accommodation of the new communication connection in said tunneling communication connection; and

16. A node as set forth in claim 15, wherein said tunneling communication connection recursively repeats merge upper level tunneling communication connection to lower level tunneling communication connection for an arbitrary times in a condition capable of branching at the terminal node.

18. A node as set forth in claim 15, wherein said connection-oriented network is an asynchronous transfer mode network, said communication

19. A node performing merge process for consolidating a plurality of communication connection of a connection-oriented network at a node on the way of transfer route into a common communication connection, comprising:

means for newly setting a tunneling communication connection capable of accommodating collateral parameter of said existing communication connection and said new communication connection in a section where said existing communication connection and said new communication connection have a common transfer route upon merging new communication connection on setting for existing communication connection; and

means for performing merge said existing communication connection and said new communication connection on said tunneling communication connection in a condition to be branched at a terminal point node.

20. A node as set forth in claim 19, wherein said tunneling communication connection recursively repeats merge upper level tunneling communication connection to lower level tunneling communication connection for an arbitrary times in a condition capable of branching at the terminal node.

22. A node as set forth in claim 19, wherein said connection-oriented network is an asynchronous transfer mode network, said communication connection is a virtual channel and said tunneling communication connection is a virtual path, and said node is an asynchronous transfer mode switch.

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